

REMARKS

Favorable reconsideration is respectfully requested.

The claims are 1-13.

The indication that claims 5, 7 and 9-12 would be allowable if rewritten in independent form is acknowledged with appreciation.

However, for reasons set forth below, it will be seen that all of the claims in this application are allowable.

Claims 1-4, 6, 8 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams et al.

This rejection is respectfully traversed.

A brief discussion of the present invention will be of assistance in appreciating Applicants' reasons for traversal of the rejection.

The purpose of the present invention is to resolve problems in conventional water-based metallic coating compositions as will now be explained.

A known water-based metallic coating composition is prepared by mixing and dispersing a resin for a metallic pigment in water and the composition is used as a top coating composition for an automobile exterior plate.

This coating composition is suitable in terms of conservation of resources and pollution control.

However, there are problems in that the coating film formed has no satisfactory flip-flop property and that it is liable to bring about metallic mottling. Such defects are fatal for a top coating composition for an automobile exterior plate, and a water-based metallic coating composition having no such problems is strongly desired.

These objectives are achieved by the present invention by use of the following two components:

(c) a metal silicate, and

(d) a polyamide resin

which have been further blended with a water-based metallic coating composition which comprises:

- (a) a resin composition for a water-based coating composition, and
- (b) a metallic pigment.

Thereby, the above-mentioned problems have been resolved.

As is clearly seen in Table 1 at page 10 of the present specification, when metal silicate of the above (c) is lacking (Comparative Example 1), or when polyamide resin of the above (d) is lacking (Comparative Example 2), the thus formed metallic coating film has defects in that the flip-flop (FF) property is insufficient, and in that metallic mottling is liable to occur, and, thus, the objective of the present invention cannot be achieved.

Turning to the cited reference, Adams et al. has, however, nothing to do with a metallic coating composition.

Although Adams et al. lists in column 17, lines 57-67 many additives which can be blended with the coating composition of Adams et al., nothing is taught or suggested about metallic pigments in Adams et al.

Adams et al. mentions, in column 17, lines 61-62, tinting pigment (i.e. color pigment) as an example of an additive. Tinting pigment is however, different from metallic pigment.

It is clear therefore that Adams et al. provides no hint about the aforementioned problems of conventional water-based metallic coating compositions which comprise a resin composition and a metallic pigment, or how to resolve these problems.

Adams et al. teaches or suggests nothing of producing a water-based metallic coating composition capable of forming a coating film which exhibits excellent flip-flop property and which is free from metallic mottling, by means of further blending metal silicate and a polyamide resin with a water-based metallic coating composition comprising a resin composition for water-based coating composition and a metallic pigment.

Therefore, Adams et al. provides no motivation to blend a combination of a metal silicate and a polyamide resin with a water-based metallic coating composition which comprises a resin

composition and a metallic pigment, with a view toward resolving the above-mentioned problems (with the expectation that the aforementioned effects may be achieved).

As stated above, the combined use of a metal silicate and a polyamide resin is essential for the achievement of the purpose of the present invention.

Adams et al., on the other hand, mention synthetic silicate simply as an example of flatting agent which is, in turn, recited as an optional component for an additive. From such generic disclosure of Adams et al., it would have been impossible to predict the use of a specific combination of metal silicate and polyamide resin, and the aforementioned advantages which are thereby achieved.

For the above-stated reasons, the present invention is unobvious over Adams et al.

No further issues remaining, allowance of this application is respectfully requested.

If the Examiner has any comments or proposals for expediting prosecution, please contact undersigned at the telephone number below.

Respectfully submitted,

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